

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 4

IN THE MATTER OF:

Jefferson Smurfit Corporation
North 8th Street
Fernandina Beach
Amelia Island, Florida 32034
EPA ID No. FLD 004 056 230

DOCKET NUMBER: 98-08-R

PROCEEDING UNDER SECTION
3013 OF THE RESOURCE
CONSERVATION AND RECOVERY
ACT, 42 U.S.C. § 6934

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ADMINISTRATIVE

ORDER REQUIRING MONITORING, TESTING,
ANALYSIS AND REPORTING

I. PRELIMINARY STATEMENTS

1. This is an administrative action instituted pursuant to Section 3013 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6934, seeking monitoring, testing, analysis and reporting.

2. Complainant is the Director of the Waste Management Division of the United States Environmental Protection Agency, Region 4 (EPA), acting pursuant to the authority vested in the Administrator by Section 3013 of RCRA, 42 U.S.C. § 6934, duly delegated, and hereby issues this administrative order.

3. Respondent is Jefferson Smurfit Corporation (Jefferson Smurfit), formerly known as Container Corporation, a company doing business in the State of Florida (the State) and which is incorporated under the laws of the State of Delaware.

4. Complainant, having been presented with information from which a determination has been made that the presence and/or release of hazardous wastes, as defined by Section 1004(5) of RCRA, 42 U.S.C. § 6903(5), at Jefferson Smurfit's Facility, may present a substantial hazard to human health or the environment, hereby orders Respondent to conduct monitoring, testing, analysis and reporting to ascertain the nature and extent of such hazard.

5. This Order is based upon the administrative record compiled by EPA and incorporated herein by reference. The record is available for review by Jefferson Smurfit and the public at EPA's regional office at Atlanta Federal Center, 61 Forsyth Street, S.W., Atlanta, Georgia 30303.

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II. PARTIES BOUND

1. This Order shall apply to and be binding upon Respondent, and its officers, directors, employees, agents, successors, assigns, trustees, receivers, and upon all consultants acting on behalf of Respondent.

2. No change in ownership or corporate or partnership status relating to the Facility will in any way alter Respondent's responsibility under this Order. Any conveyance of title, easement, or other interest in the Respondent's Facility or a portion of the Respondent's Facility, shall not affect Respondent's obligation under this Order. Respondent shall be responsible for and liable for any failure to carry out all activities required by Respondent by the terms and conditions of the Order, regardless of Respondent's use of employees, agents, contractors, or consultants to perform any such tasks.

A bona fide purchaser of a portion of the Facility shall not be subject to any obligation under this Order relating to portions of the Facility not owned by such purchaser, other than to provide necessary access to Respondent and to EPA.

3. Respondent shall provide a copy of this Order to all contractors, laboratories, and consultants retained to conduct or monitor any portion of the work performed pursuant to this Order within fourteen (14) days of the issuance of this order or the retention of such person(s), whichever occurs later, and shall condition all such contracts on compliance with the terms of this Order.

4. Respondent shall give written notice of this Order to any successor in interest prior to the transfer of ownership or operation of the Facility or a portion thereof and shall notify EPA within ten (10) working days prior to such transfer.

III. FINDINGS OF FACTS

1. Jefferson Smurfit is a "person" as that term is defined in Section 1004(15) of RCRA, 42 U.S.C. § 6903(15), and is the "owner" and "operator" of a "facility" located at North 8th Street, Fernandina Beach, Nassau County, Florida, (Facility) as those terms are defined in 40 C.F.R. § 260.10.

2. Jefferson Smurfit owns and operates an unbleached Kraft pulp and paper mill in Nassau County, Florida. The Facility encompasses approximately 110 acres and is bounded on the west by the Amelia River, on the east by a residential community, on the north by marshland, and on the south by the City of Fernandina.

3. On August 13, 1980, Jefferson Smurfit submitted to EPA its notification of hazardous waste activity (EPA Form 8700-12), pursuant to Section 3010 of RCRA, identifying itself as a treatment/storage and/or disposal facility, as well as a generator of hazardous waste.

4. On November 18, 1980, Jefferson Smurfit submitted to EPA a Part A Application for a RCRA operating permit, pursuant to Section 3005(e) of RCRA, identifying itself as a hazardous waste treatment, storage and disposal facility and eligible for "interim status." Under 40 C.F.R. § 270.1(b), interim status means that a facility shall be treated as having been issued a permit until such time as a final administrative disposition of its permit application has been made.

5. On November 18, 1980, Jefferson Smurfit operated two hazardous waste surface impoundments: the Lime Mud Pond and the Demineralization Pond. Both surface impoundments managed corrosive hazardous waste streams. The Lime Mud Pond managed excess lime mud which could have a pH of 12.5 or higher on occasion. The Demineralization Pond managed backwash water from the Facility's ion exchange beds which could also have a pH of 12.5 or higher on occasion. Both ponds were used for the storage, treatment, or disposal of corrosive hazardous wastes. Under 40 C.F.R. § 270.1(b), the Facility achieved interim status for both ponds because: 1) Jefferson Smurfit was an existing facility, as that term is defined under 40 C.F.R. § 260.10, on November 11, 1980, the effective date of 40 C.F.R. § 261.22, the hazardous waste regulations identifying corrosive waste streams as hazardous; 2) Jefferson Smurfit complied with the notification requirements of Section 3010(a) of RCRA, 42 U.S.C. § 6930(a); and 3) Jefferson Smurfit made application for a permit. Both ponds received corrosive wastes until at least December 1982. Both ponds closed after January 26, 1983, under state-approved closure plans adhering to the closure standards found in 40 C.F.R. § 265.115.

6. On December 1, 1987, EPA promulgated revisions to 40 C.F.R. § 270.1(c) (52 Fed. Reg. 45788) which required owners and operators of landfills, surface impoundments, waste piles, and land treatment units that received waste after July 26, 1982 or which certified closure according to 40 C.F.R. 265.115 after January 26, 1983, to have post closure permits unless the owners and operators demonstrated that their Interim Status clean closure was equivalent to the clean closure standards contained under 40 C.F.R. Part 264. Owners and operators electing to demonstrate that their earlier closure was equivalent to the clean closure standards contained under 40 C.F.R. Part 264 were said to be subject to an "equivalency demonstration." Failure to make an equivalency determination does not result in loss of interim status.

7. As the Demineralization Pond and the Lime Mud Pond both received corrosive hazardous wastes after July 26, 1982 and closed under the closure standard contained under 40 C.F.R. § 265.115 after January 26, 1983, Respondent is required to either make an equivalency demonstration under 40 C.F.R. § 270.1(c) for both ponds or to obtain post closure permits for both ponds. The Facility has not conducted an equivalency demonstration or obtained a post closure permit for either pond. As a result, the Facility retains interim status for the ponds.

8. Jefferson Smurfit generates several hazardous waste streams as follows: spent fluorescent light tubes which may be characteristically hazardous for the constituent mercury (D009); solvent contaminated oil rags which may be characteristically hazardous for ignitability (D001) or which may contain one or more listed hazardous waste streams (F001, F002, F004, F005); lead dross which may be characteristically hazardous for the constituent lead (D008); and

residue from punctured aerosol cans which may be characteristically hazardous for ignitability (D001) or which may contain one or more listed hazardous waste streams (F001, F002, F004, F005). Each waste stream is collected in individual satellite accumulation containers at the point of generation, in accordance with 40 C.F.R. § 262.34. When the containers are full, they are either moved to a less-than-90-day container storage area or picked up for removal by Jefferson Smurfit's hazardous waste contractor.

9. Hazardous wastes identified in Paragraph 8 above are "stored," as that term is defined in Section 1004 of RCRA, 42 U.S.C. 6903(33), by Jefferson Smurfit prior to shipment offsite.

10. Hazardous wastes are defined as set forth in Section 1004(5) of RCRA, 42 U.S.C. § 6903(5), and include hazardous constituents. Hazardous constituents are those listed in Appendix VIII to 40 C.F.R. Part 261 or any constituent identified in Appendix IX to 40 C.F.R. Part 264.

11. Following are descriptions of areas at the Facility which may have released hazardous waste or hazardous constituents and which require investigation.

12. Jefferson Smurfit operates five boilers as follows:

<u>Boiler I.D.</u>	<u>Fuel Burned</u>
No. 5 power boiler	Bark, wastewater treatment sludge, saw dust, No. 6 fuel oil
No. 7 power boiler	Bark ash from No. 5 boiler, coal
No. 4 recovery boiler	Black liquor
No. 5 recovery boiler	Black liquor
package boiler	Unknown

13. Air emissions from Jefferson Smurfit's power and recovery boilers are routed through electrostatic precipitators to control particulate emissions. Electrostatic precipitator ash from the No. 5 power boiler is staged in the Boiler Ash Accumulation Area prior to its use as a feed stock for the No. 7 power boiler. The Boiler Ash Accumulation Area consists of bare earth with no secondary containment, no liners, and no runoff/runoff controls to prevent rainwater or stormwater from entering and passing through the ash pile. Rain falling on the boiler ash pile can percolate through the pile onto the unprotected ground below, carrying any hazardous constituents present in the ash into nearby soils and groundwater. Storm water washing through the ash pile can carry the ash and any hazardous constituents in the ash into the storm drainage ditches and the Amelia River. Ash from the No. 5 and the No. 7 power boilers contains arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. The ash may also contain other hazardous constituents.

14. Process water from the manufacturing process and some storm water is routed through a series of process trenches and sewers, known as the Process Sewer System, to the

Facility's wastewater treatment plant. This process water contacts various chemicals, oils, and other substances used in the manufacturing process; thus, the process water entering the wastewater treatment plant would contain hazardous constituents associated with the manufacturing chemicals, oils, and other substances. The process trenches also pick up any spills of black liquor, green liquor, slaker grits, or white liquor. 40 C.F.R. § 261.4(a)(6) exempts from consideration as a solid waste, and consequently a hazardous waste, those pulping liquors which are reclaimed in a pulping liquor recovery furnace then routed back for reuse in the process. However, this exemption does not apply to pulping liquors which cannot be recovered for reuse, such as those here at the Facility which spill onto the ground. Black liquor can be corrosive. Piping material used for some of the process sewers is concrete. Concrete piping will react in a corrosive environment. A corrosive environment will also adversely impact pipe joint integrity. Piping or joints which have breached will release untreated process water containing hazardous waste or hazardous constituents directly into the soils and groundwater in the vicinity of the pipe. Some portions of the Facility's process sewer system have been in place more than 50 years. The integrity of the Facility's process sewers and trenches is unknown.

15. The Facility has constructed a Spill Containment System to contain spills and channel lost process material, primarily black liquor, back to the process. It consists of a series of spill tanks, concrete secondary containment structures around spill and process tanks, and a network of concrete drains and underground piping located in the areas of the No. 5 evaporators, the C-line washers, the Camber digester, the heavy black liquor storage area, and the paper mill. During a visual inspection of the Facility conducted on July 23-25, 1997, potential integrity problems were observed in the concrete secondary containment in the vicinity of the No. 5 Multiple Effect Evaporator System. Additionally, the spill tank in this area was buckled, was stained in various locations, and had dents and punctures repaired with metal squares, suggesting prior releases from the tank. Releases from the Spill Containment System would carry process materials, including white liquor and black liquor, into the soils and groundwater beneath the area of the spill. 40 C.F.R. § 261.4(a)(6) exempts from consideration as a solid waste, and consequently a hazardous waste, those pulping liquors which are reclaimed in a pulping liquor recovery furnace then routed back for reuse in the process. However, this exemption does not apply to pulping liquors which cannot be recovered for reuse, such as those here at the Facility which spill onto the ground. Black liquor may be corrosive. Other process spills may carry hazardous constituents associated with chemicals used in the manufacturing process.

16. The Facility's wastewater treatment plant consists of a series of treatment units which operate on a continuous feed basis. The train of wastewater treatment units include a grit chamber, primary clarifier, wastewater cooling tower, UNOX basin, two secondary clarifiers, blend tanks, and two screw presses. Treated effluent is discharged to the Amelia River under an NPDES discharge permit which sets effluent limits. Wastewater treatment sludge from the primary and secondary clarifier contains arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver. Wastewater treatment sludge and partially treated wastewater may contain other hazardous constituents associated with chemicals used in the manufacturing process, however, the Facility has not analyzed the sludge for hazardous waste organics. Sludge from the

primary clarifier and the secondary clarifier is collected and either burned in the No. 5 power boiler or is applied as a soil conditioner to the Facility's timberlands. Prior to burning or placement on the ground, the sludge is stored in one of three wastewater treatment sludge staging areas. The first sludge staging area is located adjacent to the northern end of the UNOX reactors. The second area is located immediately south of the secondary clarifiers. The third area consists of four impoundments located immediately west of the primary clarifier. None of the sludge storage areas or impoundments are equipped with a liner or with runoff controls to prevent hazardous constituents in the sludge from being carried by rainfall or stormwater into the soils, the groundwater, or nearby surface water bodies. Therefore, the management of the sludge in the storage areas, and when burning the sludge or placing the sludge on the ground, may have caused a release of hazardous constituents.

17. At times, operation of the wastewater treatment plant resulted in unpermitted releases of untreated or partially treated wastewater or wastewater solids as follows:

- a. In April 1985, a pump blockage resulted in overflows from the grit chamber onto the surrounding ground.
- b. In May 1987, a structural failure in the primary clarifier resulted in the release of untreated sludge onto the ground.
- c. In August 1987, November 1995, March 1996, May 1996, and July 1996, the Facility discharged wastewater exceeding its NPDES permitted discharge limits. This partially treated or untreated wastewater entered the Wastewater Effluent Open Ditch, an unlined earthen conveyance, prior to discharge to the Amelia River.

18. The releases described above in Paragraph 17 from the individual wastewater treatment units described above in Paragraph 16 would carry untreated or partially treated wastewater and hazardous constituents into the soils and possibly the groundwater beneath the area of the release. The releases of partially treated or untreated wastewater from the wastewater treatment plant would first enter the Wastewater Effluent Open Ditch, an unlined earthen conveyance. Untreated or partially treated wastewater may release hazardous constituents into the soils lining the ditch. The Wastewater Effluent Open Ditch is dredged periodically. Soils generated during dredging are stored directly on the unprotected ground in the south woodyard area of the Facility immediately west of the railroad tracks and immediately south of the diesel and gasoline tank farm. Dredged soils would also contain the hazardous constituents carried by the untreated or partially treated wastewater.

19. The Facility maintains two Atlas Storage Bins, both of which are located immediately south and southwest of the grit chamber of the wastewater treatment plant. Each of these bins is a silo shaped structure elevated on metal pilings. During a visual site inspection of the Facility conducted on July 23-25, 1997, several 55-gallon drums were observed beneath the bins. The drums were rusty and partially covered by woodchips, dust, and earth. Soils immediately surrounding one of the drums were stained, indicating a potential release of material from the drums.

20. Rejects from the Facility's Recycle Plant's pulping process are staged in the Recycle Rejects Bunker prior to shipment offsite to a Class 1 solid waste landfill. The Recycle Rejects Bin consists of a concrete bunker measuring approximately 10 yards by 8 yards. Materials placed in the Rejects bin include glass, plastic, metal bailing strips, rope and trace amounts of corrugated material separated from the bulk corrugated material used in recycling. During the visual site inspection conducted on July 23-25, 1997, liquid from the Recycle Rejects Bin flowed onto the soils adjacent to the concrete. Previous analysis indicates that Recycle Rejects contain leachable levels of hazardous constituents barium and cadmium. If present in the liquid flowing from the bin on the date of the visual site inspection, these constituents would enter the soil and groundwater adjacent to and beneath the bin.

21. In June 1994, Jefferson Smurfit removed an above ground storage tank once used to store Bunker C fuel oil. The tank was located approximately 60-90 feet west of the No. 5 Recovery Boiler building on the north side of the site. During removal of the tank, Jefferson Smurfit discovered soil and groundwater contamination in the soils beneath the area of the tank. Jefferson Smurfit initiated remedial actions which included soil removal. FDEP then required Jefferson Smurfit to perform Contamination Assessment during which the area of investigation was twice expanded. The Contamination Assessment Report, dated October 12, 1995, indicated that chromium concentrations exceeding removal criteria remained in the soil and that chromium and arsenic contamination remained in the groundwater at levels of 65 $\mu\text{g/l}$ and 354 $\mu\text{g/l}$, respectively. The groundwater also contains benzene, at concentrations of 24 $\mu\text{g/l}$, and naphthalene at 330 $\mu\text{g/l}$. Other constituents associated with Bunker C fuel oil (see below) may also be present in the soils and groundwater.

22. Bunker C fuel oil is a mixture of aliphatic petroleum hydrocarbons and aromatic petroleum hydrocarbons. Bunker C fuel oil can contain benzo[a]anthracene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, chrysene, dibenzo[a,h]anthracene, 7,12-dimethylbenz[a]anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, 3-methylcholanthrene, and naphthalene. It may also contain heavy metals and trace amounts of benzene and toluene. The Facility also uses fuels of a higher grade than Bunker C fuel. If any fuels of a higher grade than Bunker C were released from the above ground storage tank, those fuels would likely contain higher concentrations of benzene or toluene. However, it is unknown at this time whether such fuels of a higher grade than Bunker C were released.

23. Jefferson Smurfit ceased its petroleum-contamination removal efforts when the Bunker C site became eligible for a state-funded cleanup under Florida's Petroleum Contamination Participation Plan (PCPP). State funded cleanup of petroleum contamination is a program unique to Florida; other states require the owner/operator to address petroleum contamination using facility funds. However, under Florida's PCPP plan, eligible sites with petroleum contamination are ranked, then cleaned up using state dollars. The ranking methodology is relative to all sites included in the comparison; the risk posed by one site is compared to the risk posed by another site in determining each site's ranking. The ranking is not a measure of the risk posed by the site. Those sites with the most severe contamination are

addressed first under the PCPP program. Cleanup of petroleum contaminated sites proceeds in this fashion as long as state funds remain available. Because Jefferson Smurfit's petroleum contamination is not as severe as contamination at other sites in the state, state funded cleanup will not proceed at the Jefferson Smurfit Facility for an indefinite time even though hazardous constituents remain in the soil and groundwater.

24. The Facility uses coal to fire its boilers. Coal is transported to the Facility and conveyed to silos for storage by an overhead conveyance system. Although the conveyor is covered, coal falls from the conveyance system to the bare soils below. Wind dispersion increases the area of coal fallout. At the time of the visual site inspection on July 23-25, 1997, extensive amounts of coal and coal dust were visible throughout the area, particularly in the southern portion of the area in the vicinity of the coal crusher. What appeared to be coal dust was also observed in a nearby storm drain. The Facility's coal can contain the hazardous constituents arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver.

25. During recent excavation for a new road (Chipper Road) in the central portion of the Facility south of the No. 1 stacker reclaimer, the Facility discovered petroleum contaminated soils. Remediation efforts were underway at the time of the visual site inspection on July 23-25, 1997. The site is currently subject to a groundwater monitoring plan required by the Florida Department of Environmental Protection.

26. The hazardous wastes or hazardous constituents identified in this Section, and other hazardous wastes or hazardous constituents which may be present at the Facility, may have the following effects on human health or the environment (Marshall Sittig, Handbook of Toxic and Hazardous Chemicals and Carcinogens (2nd ed. 1985)):

27. Arsenic is a heavy metal and a constituent of D004 hazardous waste. Arsenic is also a carcinogen, an EPA hazardous substance and an EPA priority toxic pollutant. The primary exposure route for carcinogenic risk is inhalation of airborne or vapor phase arsenic. Arsenic is ten times more carcinogenic by means of inhalation than by ingestion or oral route.

28. Benzene is a carcinogen, a hazardous substance, a constituent of D018 waste, and a priority toxic pollutant. Benzene poses an inhalation, ingestion, and dermal contact risk. Exposure to liquid and vapor may produce primary irritation to skin, eyes, and upper respiratory tract. Acute exposure to benzene results in central nervous system depression. Headache, dizziness, nausea, convulsions, coma, and death may result. Chronic exposure to benzene causes blood changes. Erythrocyte, leukocyte, and thrombocyte counts may increase, then aplastic anemia may develop with anemia, leukopenia, and thrombocytopenia. Benzene appears to be leukemogenic as well.

29. Cadmium is a heavy metal and a constituent of D006 hazardous waste. Cadmium, or one of its compounds, is classified as a probable carcinogen (Group B1), hazardous air pollutant under the Clean Air Act, and a hazardous substance under the Federal Water Pollution Control

Act. Under the Emergency Planning Community Right-to-Know Act of 1986, facilities which manufacture, import, process, or use this chemical must annually report the release of this chemical to any environmental media. Cadmium is a hazardous waste subject to regulation pursuant to RCRA under several circumstances including when it is contained in a sludge applied to land or when burned in an incinerator or boiler and industrial furnace. The primary exposure route is inhalation and ingestion. Cadmium is an irritant to the respiratory tract. Prolonged exposure can cause anosmia and a yellow stain on the teeth. Once absorbed, cadmium has a very long half-life and is retained by the kidneys and liver. Systemic changes due to cadmium absorption include damage to the kidneys with proteinuria, anemia, and elevated sedimentation rate.

30. Chromium is a heavy metal, a hazardous substance, a hazardous waste constituent, and a priority toxic pollutant. Chromium occurs in several different forms. The most prevalent forms are chromium (0), trivalent chromium (or chromium (III)), hexavalent chromium (or chromium (VI)). Certain hexavalent chromium (chromium (VI)) compounds are carcinogenic, including calcium chromate, chromium trioxide, lead chromate, sodium dichromate, strontium chromate and zinc chromate. Chromium compounds in the trivalent state are of a low order of toxicity. In the hexavalent state, chromium compounds are irritants, corrosive and can enter the body by ingestion, inhalation, and through the skin. Acute exposures to chromium dust or mist can cause coughing, wheezing, headache, dyspnea, fever, and loss of weight. Tracheobronchial irritation and edema persist after other symptoms subside.

31. Lead is a heavy metal, a constituent of D008 hazardous waste, a hazardous substance, and a priority toxic pollutant. Lead presents an inhalation, ingestion, and dermal risk. Early effects of lead poisoning include decreased physical fitness, fatigue, sleep disturbance, headache, aching bones and muscles, digestive symptoms, abdominal pains and decreased appetite. Later effects of lead poisoning include anemia, pallor, a "lead line" on the gums, and decreased hand grip strength. Central nervous system effects include severe headache, convulsions, coma, delirium, and possible death. The kidneys can also suffer damage after long periods of exposure.

32. Mercury is a heavy metal, a constituent of D009 hazardous waste, a hazardous substance, and a priority toxic pollutant. Mercury is an inhalation, ingestion and dermal risk. Acute poisoning due to mercury vapors affects the lungs primarily, in the form of acute interstitial pneumonitis, bronchitis, and bronchiolitis. Exposure to lower levels over prolonged periods produces symptom complexes that vary widely and which may include weakness, loss of appetite, loss of weight, insomnia, indigestion, diarrhea, metallic taste in the mouth, inflammation of the gums, loosening of teeth, irritability, loss of memory and tremors of fingers, eyelids, lips, or tongue. More extensive exposures can produce extreme irritability, excitability, anxiety, delirium with hallucinations, melancholia, or manic depressive psychosis. In general, chronic exposure produces four classical symptoms: gingivitis, sialorrhea, increased irritability, and muscular tremors.

33. Selenium is a constituent of D010 hazardous waste, and a priority toxic pollutant. It presents an inhalation, ingestion, and dermal risk of absorption. Elemental selenium is considered relatively non-irritating and is poorly absorbed. Other selenium compounds are strong vesicants and can cause destruction of the skin. They are strong irritants to the upper respiratory tract and eyes and may cause irritation of the mucous membrane of the stomach. Selenium compounds also may cause dermatitis of exposed areas. Selenium dioxide inhaled in large quantities may produce pulmonary edema. Other systemic effects include pallor, lassitude, irritability, vague gastrointestinal symptoms, and giddiness. Liver damage and other effects have long been recognized in livestock grazing on high selenium soils.

34. Silver is a precious metal and a heavy metal, a constituent of D011 hazardous waste, a hazardous constituent and a priority toxic pollutant. It is an inhalation, ingestion and dermal risk. Silver nitrate dust and solutions are highly corrosive to the skin, eyes, and intestinal tract. The dust of silver nitrate may cause local irritation of the skin, burns of the conjunctiva, and blindness. Localized pigmentation of the skin and eyes may occur. All forms of silver are extremely cumulative once they enter the body tissues and very little is excreted. Generalized argyria develops when silver oxide or salts are inhaled or possibly ingested by workmen who handle compounds of silver. The condition produces no constitutional symptoms but may lead to permanent pigmentation of the skin and eyes.

IV. DETERMINATIONS

1. Based upon the foregoing Findings of Fact, and pursuant to Section 3013 of RCRA, 42 U.S.C. § 6934, EPA has hereby determined that the Jefferson Smurfit Facility, owned and operated by Respondent, is a facility at which hazardous wastes are present and at which hazardous wastes have been generated, treated, stored and disposed.

2. Based upon the foregoing Findings of Fact, and pursuant to Section 3013 of RCRA, 42 U.S.C. § 6934, EPA has further determined that there may be a substantial hazard to human health or the environment due to the presence of hazardous wastes and/or constituents and potential releases of hazardous wastes and/or constituents from the Jefferson Smurfit Facility.

3. EPA has also determined that Respondent, as owner or operator of the Jefferson Smurfit Facility, is the party responsible for conducting the actions ordered herein, which are necessary to ascertain the nature and extent of the hazard to human health or the environment.

V. ORDER

1. Based upon the Findings of Fact and Determinations as set forth above, Respondent is hereby ordered, pursuant to Section 3013 of RCRA, 42 U.S.C. § 6934, to submit a written proposal to EPA, within thirty (30) calendar days from the issuance of this Order, for carrying out monitoring, testing, analysis, and reporting which are necessary to ascertain the nature and extent of the hazard posed by the actual or suspected releases from the following Solid Waste

Management Units (SWMUs) at Jefferson Smurfit's Facility; and is hereby ordered to implement such proposal within seven (7) calendar days after approval, or modification and approval by EPA, in accordance with the approved terms and schedules.

Boiler Ash Accumulation Area
Wastewater Treatment Solids Staging Area
Spill Control System
Process Sewer System
Those units or areas of the wastewater treatment system upstream of the NPDES permitted outfall which have discharged untreated or partially treated wastewater.
Wastewater Effluent Open Ditch
Stormwater Ditch Dredge Piles
Atlas Bin Drum Storage/Disposal Area
Recycle Rejects Bunkers
Coal Conveyance System Fall Out Area
New Chipper Road Petroleum Release
Coal Ash Pile

2. Such written proposal shall be specific and shall include, but not be limited to, the following:

- A. A plan and timetable, including progress reports, to collect and analyze representative soil samples of appropriate size, depth, and location for all releases associated with each of the SWMUs listed above to determine the nature and extent of contamination of soil. The plan shall include the number, location, and depth of the samples and the parameters of the analysis.
- B. A plan and timetable, including progress reports, to collect and analyze groundwater samples and characterize groundwater quality and the extent of any groundwater contamination, both vertically and horizontally, which may exist onsite and which may be migrating from the Facility, including, but not limited to, those SWMUs listed above which are found to have soil contamination above background levels. The plan shall include the number, location, and depth of monitoring wells, and the parameters of the analysis.
- C. A plan and timetable to collect and analyze representative samples of appropriate size, depth, and location to determine the nature and extent of contamination of sediment for all releases of hazardous wastes and/or hazardous constituents at the Facility.
- D. A plan and timetable to collect and analyze representative surface water samples of appropriate size, depth, and location to determine the nature and extent of contamination of surface water for all releases of hazardous wastes and/or hazardous constituents at the Facility.

E. A provision for site access for employees, agents, and contractors of EPA at all reasonable times for purposes of inspection and verifying compliance with the provisions of this Order, in accordance with and pursuant to the authority of Section 3007 of RCRA, 42 U.S.C. § 6927.

3. Jefferson Smurfit shall consider and address the guidelines established by EPA which are identified in Attachment 1 to this Order, and which are incorporated by reference herein.

4. The written proposal, and subsequent reports, required to be submitted under this Order shall be mailed to:

Jewell Grubbs, Chief
Enforcement and Compliance Branch
Waste Management Division
United States Environmental Protection Agency
Atlanta Federal Center
61 Forsyth Street, S.W.
Atlanta, Georgia 30303-3104

and

Satish Kastury, Director
Hazardous Waste Regulation Section
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

and

Ashwin Patel, Director
Hazardous Waste Regulation
Florida Department of Environmental Protection
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256

5. Any changes or modifications proposed by Respondent to the approved plans and timetables required in Paragraph 2 of this Section must be approved, or may be modified and approved, by EPA prior to implementation.

VI. OPPORTUNITY TO CONFER

1. As provided in Section 3013(c) of RCRA, 42 U.S.C. § 6934(c), Respondent, or its representative, has the right to confer with EPA on the actions required under Section V of this Order. **The scheduling of a conference with EPA does not relieve Jefferson Smurfit of the obligation to submit the written proposal required under Section V of this Order within thirty (30) days of the issuance of this Order.** The opportunity to confer with EPA may be pursued by Respondent either before or after the proposal required under Section V is due.

2. At any time prior to the submittal of the written proposal required under Section V of this Order, Respondent, or its representative, may also provide information, in writing or in person, to EPA to show why Respondent should not be subject to this Order, and may provide whatever additional information Respondent believes is relevant to the disposition of this matter.

3. Any request for a conference with EPA, and other questions regarding this Order should be directed to:

Joan Redleaf Durbin
Associate Regional Counsel
U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth St., S.W.
Atlanta, Georgia 30303
(404) 562-9544

VII. POTENTIAL CONSEQUENCES OF FAILURE TO COMPLY

1. Pursuant to Section 3013(d) of RCRA, 42 U.S.C. § 6934(d), if EPA determines that Respondent is not able to conduct the activities required by this Order, that Respondent is not able to conduct the activities contained in the EPA-approved proposal, or that the actions carried out by Respondent are unsatisfactory, then EPA itself may conduct monitoring, testing or analysis deemed reasonable to ascertain the nature and extent of the hazard associated with the Facility, or authorize the State to conduct such monitoring, testing or analysis. Respondent may then be required to reimburse EPA for the costs of such activity pursuant to Section 3013(d) of RCRA, 42 U.S.C. § 6934(d).

2. In the event that Respondent fails or refuses to comply with any requirement of this Order, EPA may commence a civil action in the U.S. District Court where Respondent is doing business, pursuant to Section 3013(e) of RCRA, 42 U.S.C. § 6934(e), to require compliance with this Order and to assess a civil penalty not to exceed \$5,500 for each day during which such failure or refusal occurs.

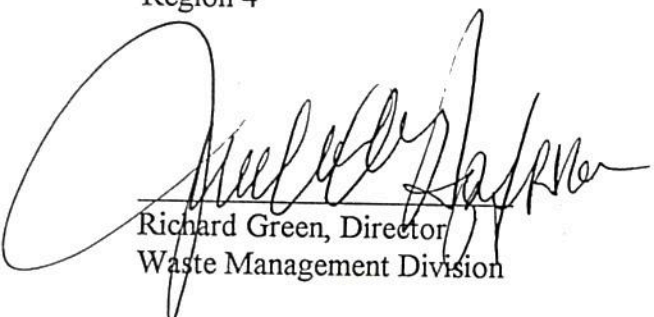
VIII. IMMINENT AND SUBSTANTIAL ENDANGERMENT

Notwithstanding any other provision of this Order, an enforcement action may be brought against Respondent pursuant to Section 7003 of RCRA, 42 U.S.C. § 6973, and/or any other applicable statutory or regulatory authority, should EPA find that the handling, storage, treatment, transportation or disposal of solid or hazardous waste at Jefferson Smurfit's Facility may present an imminent and substantial endangerment to human health or the environment.

IX. EFFECTIVE DATE

The effective date of this Order is the date it is signed by the Director of the Waste Management Division, EPA Region 4.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 4



Richard Green, Director
Waste Management Division

9/29/98
Date

CERTIFICATE OF SERVICE

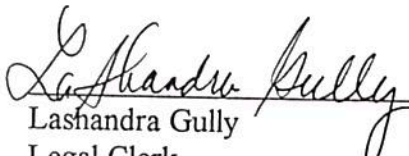
I hereby certify that I have caused a copy of the foregoing Order Requiring Monitoring, Testing, Analysis and Reporting and the Certificate of Service to be served upon the person designated below on the date below, by causing said copy to be deposited in the U.S. Mail, First Class (Certified Mail, Return Receipt Requested, postage prepaid), at Atlanta, Georgia, in an envelope addressed to:

Warren S. Flenniken
Vice President and General Manager
Jefferson Smurfit Corporation
North 8th Street
Fernandina Beach, FL 32034

I have further caused the original and one copy of said Order and the Certificate of Service to be filed with the Regional Hearing Clerk, United States Environmental Protection Agency, Region 4, Atlanta Federal Center, 61 Forsyth Street, S.W., Atlanta, Georgia 30303-3104, on the date specified below.

This is said person's addresses last known to subscriber.

Dated this 24th day of Sep., 1998.


Lashandra Gully
Legal Clerk
Environmental Accountability Division
U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth St., S.W.
Atlanta, Georgia 30303

ATTACHMENT I

Guidance:

1. **RCRA Facility Investigation (RFI) Guidance; Interim Final; EPA/530-SW-89-031; 05/15/89;**
2. **EPA Environmental Compliance Branch Standard Operating Procedures & Quality Assurance Manual (SOP); most recent version.**
3. **Corrective Action for Solid Waste Management Units at Hazardous Waste Management Facilities (Subpart S); Proposed Rule; 07/27/90; Per an HQ memo, this can be used as updated guidance on concepts already established such as "action levels" which was used in the RFI Guidance.**
4. **RCRA Corrective Action Plan (CAP); Final Draft 09/30/93; This provides guidance for the specific technical requirements listed in the appendices of the model HSWA permit.**
5. **RCRA Ground-Water Monitoring; Draft Technical Guidance; EPA/530-R-93-001; 11/92;**
6. **Handbook of RCRA Ground-Water Monitoring Constituents: Chemical & Physical Properties; 40 CFR, Appendix IX; EPA/530-R-92-022; 09/92;**
7. **Statistical Training Course for Ground-Water Monitoring Data Analysis; EPA/530-R-93-003; 1992;**
8. **Determining The Integrity Of Concrete Sumps; Technical Guidance Document; EPA/530-R-93-005; 1993;**
9. **Stabilization Technologies for RCRA Corrective Actions; Handbook; EPA/625/6-91/026; 08/91;**
10. **Remediation Technologies Screening Matrix and Reference Guide; EPA/542-B-93-005; Reference for Interim Measures.**
11. **RCRA Facility Assessment Guidance; EPA/530-SW-86-053; 10/09/86; This can be used along with the Athens SOP to help focus the Confirmatory Sampling Work Plan in determining whether or not a release has occurred.**
12. **Catalogue of Hazardous and Solid Waste Publications; Sixth Edition; EPA/530-B-92-001; 06/92; This lists and summarizes EPA's Office of Solid Waste (OSW) documents.**

13. **RCRA Permit Policy Compendium**; EPA/530-SW-91-062; 08/15/91; This compiles HQ guidance and letters on policy and procedural issues.
14. **Identification of Regulated Hazardous Waste**; A.T. Kearney Training; 06/01/93 through 06/03/93. Reference for hazardous waste determination for Interim Measures.